

We claim:

1. A composition for supplementing nutritional deficiencies comprising Vitamin A, Vitamin D, Vitamin C, Vitamin E, B-complex, calcium, iron, magnesium, zinc, and copper, wherein said composition is administerable to a patient.
2. The composition of claim 1, wherein said patient is in a physiologically stressful state.
3. The composition of claim 2, wherein said physiologically stressful state comprises a disease state.
4. The composition of claim 3, wherein said disease state is selected from the group consisting of a pulmonary disorder, a hematological/oncological disorder, a cancer, a disorder of the immune system, a cardiovascular disorder, a hepatic/biliary disorder, a disorder associated with pregnant females, and a disorder associated with a fetus.
5. The composition of claim 1, wherein said patient is pregnant.
6. The composition of claim 1, wherein said patient is lactating.
7. The composition of claim 1, wherein said nutritional deficiencies are a result of pregnancy.
8. The composition of claim 1, wherein said nutritional deficiencies are a result of lactation.
9. The composition of claim 1, wherein said nutritional deficiencies are a result of elevated metabolic demand.
10. The composition of claim 1, wherein said nutritional deficiencies are a result of increased plasma volume.
11. The composition of claim 1, wherein said nutritional deficiencies are a result of decreased concentrations of nutrient-binding proteins.
12. The composition of claim 11, wherein said nutrient-binding proteins comprise one or more proteins selected from the group consisting of serum-ferritin, maltose-binding protein, lactoferrin, calmodulin, tocopheryl binding protein, riboflavin binding protein, retinol binding protein, transthyretin, high density lipoprotein-apolipoprotein A1, folic acid binding protein, and 25-hydroxyvitamin D binding protein.
13. The composition of claim 1, wherein said Vitamin A comprises beta carotene.
14. The composition of claim 1, wherein said Vitamin D comprises cholecalciferol.
15. The composition of claim 1, wherein said Vitamin C comprises ascorbic acid.

16. The composition of claim 1, wherein said Vitamin E comprises dl-alpha-tocopheryl acetate.
17. The composition of claim 1, wherein said B-complex comprises one or more vitamins selected from the group consisting of folic acid, Vitamin B₁, Vitamin B₂, Vitamin B₆, Vitamin B₁₂, and niacin.
18. The composition of claim 17, wherein said Vitamin B₁ comprises thiamine mononitrate.
19. The composition of claim 17, wherein said Vitamin B₂ comprises riboflavin.
20. The composition of claim 17, wherein said Vitamin B₆ comprises pyridoxine hydrochloride.
21. The composition of claim 17, wherein said Vitamin B₁₂ comprises cyanocobalamin.
22. The composition of claim 17, wherein said niacin comprises niacinamide.
23. The composition of claim 1, wherein said calcium comprises calcium carbonate.
24. The composition of claim 1, wherein said iron comprises ferrous fumarate.
25. The composition of claim 1, wherein said magnesium comprises magnesium oxide.
26. The composition of claim 1, wherein said zinc comprises zinc oxide.
27. The composition of claim 1, wherein said copper comprises copper oxide.
28. The composition of claim 1, wherein said Vitamin A is in the range of about 2430 IU to about 2970 IU.
29. The composition of claim 1, wherein said Vitamin D is in the range of about 360 IU to about 440 IU.
30. The composition of claim 1, wherein said Vitamin C is in the range of about 63 mg to 77 about mg.
31. The composition of claim 1, wherein said Vitamin E is in the range of about 27 IU to about 33 IU.
32. The composition of claim 17, wherein said folic acid is in the range of about 0.9 mg to about 1.1 mg.
33. The composition of claim 17, wherein said Vitamin B₁ is in the range of about 1.44 mg to about 1.76 mg.
34. The composition of claim 17, wherein said Vitamin B₂ is in the range of about 1.62 mg to about 1.98 mg.
35. The composition of claim 17, wherein said Vitamin B₆ is in the range of about 2.25 mg to about 2.75 mg.

36. The composition of claim 17, wherein said Vitamin B₁₂ is in the range of about 10.8 mcg to about 13.2 mcg.
37. The composition of claim 17, wherein said niacin is in the range of about 16.2 mg to about 19.8 mg.
38. The composition of claim 1, wherein said calcium is in the range of about 90 mg to about 110 mg.
39. The composition of claim 1, wherein said iron is in the range of about 58.5 mg to about 71.5 mg.
40. The composition of claim 1, wherein said magnesium is in the range of about 22.5 mg to about 27.5 mg.
41. The composition of claim 1, wherein said zinc is in the range of about 22.5 mg to about 27.5 mg.
42. The composition of claim 1, wherein said copper is in the range of about 1.8 mg to about 2.2 mg.
43. The composition of claim 1, wherein said composition further comprises a pharmaceutically acceptable carrier.
44. The composition of claim 43, wherein said pharmaceutically acceptable carrier comprises one or more of water, oil, alcohol, a flavoring agent, a preservative, a coloring agent, starch, a sugar, a diluent, a granulating agent, a lubricant, a binder, and a disintegrating agent.
45. A composition for supplementing nutritional deficiencies comprising about 2430 IU to about 2970 IU Vitamin A, about 360 IU to about 440 IU Vitamin D, about 63 mg to about 77 mg Vitamin C, about 27 IU to about 33 IU Vitamin E, about 0.9 mg to about 1.1 mg folic acid, about 1.44 mg to about 1.76 mg Vitamin B₁, about 1.62 mg to about 1.98 mg Vitamin B₂, about 2.25 mg to about 2.75 mg Vitamin B₆, about 10.8 mcg to about 13.2 mcg Vitamin B₁₂, about 16.2 mg to about 19.8 mg niacin, about 90 mg to about 110 mg calcium, about 58.5 mg to about 71.5 mg iron, about 22.5 mg to about 27.5 mg magnesium, about 22.5 mg to about 27.5 mg zinc, and about 1.8 mg to about 2.2 mg copper, wherein said composition is administerable to a patient.
46. A composition for supplementing nutritional deficiencies comprising 2700 IU Vitamin A, 400 IU Vitamin D, 70 mg Vitamin C, 30 IU Vitamin E, 1 mg folic acid, 1.6 mg Vitamin B₁, 1.8 mg Vitamin B₂, 2.5 mg Vitamin B₆, 12 mcg Vitamin B₁₂, 18 mg niacin, 100

mg calcium, 65 mg iron, 25 mg magnesium, 25 mg zinc, and 2 mg copper, wherein said composition is administerable to a patient.

47. A composition for supplementing nutritional deficiencies comprising less than about 160 mg calcium, more than about 20 mg iron, and copper, wherein said composition is administerable to a patient.

48. The composition of claim 47, wherein said patient is in a physiologically stressful state.

49. The composition of claim 48, wherein said physiologically stressful state comprises a disease state.

50. The composition of claim 49, wherein said disease state is selected from the group consisting of a pulmonary disorder, a hematological/oncological disorder, a cancer, a disorder of the immune system, a cardiovascular disorder, a hepatic/biliary disorder, a disorder associated with pregnant females, and a disorder associated with a fetus.

51. The composition of claim 47, wherein said patient is pregnant.

52. The composition of claim 47, wherein said patient is lactating.

53. The composition of claim 47, wherein said nutritional deficiencies are a result of pregnancy.

54. The composition of claim 47, wherein said nutritional deficiencies are a result of lactation.

55. The composition of claim 47, wherein said nutritional deficiencies are a result of elevated metabolic demand.

56. The composition of claim 47, wherein said nutritional deficiencies are a result of increased plasma volume.

57. The composition of claim 47, wherein said nutritional deficiencies are a result of decreased concentrations of nutrient-binding proteins.

58. The composition of claim 57, wherein said nutrient-binding proteins comprise one or more proteins selected from the group consisting of serum-ferritin, maltose-binding protein, lactoferrin, calmodulin, tocopheryl binding protein, riboflavin binding protein, retinol binding protein, transthyretin, high density lipoprotein-apolipoprotein A1, folic acid binding protein, and 25-hydroxyvitamin D binding protein.

59. The composition of claim 47, wherein said calcium comprises calcium carbonate.

60. The composition of claim 47, wherein said calcium is in the range of about 90 mg to about 110 mg.

61. The composition of claim 47, wherein said iron comprises ferrous fumarate.
62. The composition of claim 47, wherein said iron is in the range of about 58.5 mg to about 71.5 mg.
63. The composition of claim 47, wherein said copper comprises copper oxide.
64. The composition of claim 47, wherein said copper is in non-chelated form.
65. The composition of claim 47, wherein said copper is in chelated form.
66. The composition of claim 47, wherein said copper is in the range of about 1.8 mg to about 2.2 mg.
67. The composition of claim 47, further comprising one or more components selected from the group consisting of Vitamin A, Vitamin D, Vitamin C, Vitamin E, B-complex, magnesium, and zinc.
68. The composition of claim 67, wherein said Vitamin A comprises beta carotene.
69. The composition of claim 67, wherein said Vitamin D comprises cholecalciferol.
70. The composition of claim 67, wherein said Vitamin C comprises ascorbic acid.
71. The composition of claim 67, wherein said Vitamin E comprises dl-alpha-tocopheryl acetate.
72. The composition of claim 67, wherein said B-complex comprises one or more vitamins selected from the group consisting of folic acid, Vitamin B₁, Vitamin B₂, Vitamin B₆, Vitamin B₁₂, and niacin.
73. The composition of claim 72, wherein said Vitamin B₁ comprises thiamine mononitrate.
74. The composition of claim 72, wherein said Vitamin B₂ comprises riboflavin.
75. The composition of claim 72, wherein said Vitamin B₆ comprises pyridoxine hydrochloride.
76. The composition of claim 72, wherein said Vitamin B₁₂ comprises cyanocobalamin.
77. The composition of claim 72, wherein said niacin comprises niacinamide.
78. The composition of claim 67, wherein said magnesium comprises magnesium oxide.
79. The composition of claim 67, wherein said zinc comprises zinc oxide.
80. The composition of claim 67, wherein said Vitamin A is in the range of about 2430 IU to about 2970 IU.
81. The composition of claim 67, wherein said Vitamin D is in the range of about 360 IU to about 440 IU.

82. The composition of claim 67, wherein said Vitamin C is in the range of about 63 mg to 77 about mg.
83. The composition of claim 67, wherein said Vitamin E is in the range of about 27 IU to about 33 IU.
84. The composition of claim 72, wherein said folic acid is in the range of about 0.9 mg to about 1.1 mg.
85. The composition of claim 72, wherein said Vitamin B₁ is in the range of about 1.44 mg to about 1.76 mg.
86. The composition of claim 72, wherein said Vitamin B₂ is in the range of about 1.62 mg to about 1.98 mg.
87. The composition of claim 72, wherein said Vitamin B₆ is in the range of about 2.25 mg to about 2.75 mg.
88. The composition of claim 72, wherein said Vitamin B₁₂ is in the range of about 10.8 mcg to about 13.2 mcg.
89. The composition of claim 72, wherein said niacin is in the range of about 16.2 mg to about 19.8 mg.
90. The composition of claim 67, wherein said magnesium is in the range of about 22.5 mg to about 27.5 mg.
91. The composition of claim 67, wherein said zinc is in the range of about 22.5 mg to about 27.5 mg.
92. The composition of claim 47, wherein said composition further comprises a pharmaceutically acceptable carrier.
93. The composition of claim 92, wherein said pharmaceutically acceptable carrier comprises one or more of water, oil, alcohol, a flavoring agent, a preservative, a coloring agent, starch, a sugar, a diluent, a granulating agent, a lubricant, a binder, and a disintegrating agent.
94. A method for supplementing nutritional deficiencies in a patient comprising administering to said patient a composition comprising Vitamin A, Vitamin D, Vitamin C, Vitamin E, B-complex, calcium, iron, magnesium, zinc, and copper.
95. The method of claim 94, wherein said patient is in a physiologically stressful state.
96. The method of claim 95, wherein said physiologically stressful state comprises a disease state.

97. The method of claim 96, wherein said disease state is selected from the group consisting of a pulmonary disorder, a hematological/oncological disorder, a cancer, a disorder of the immune system, a cardiovascular disorder, a hepatic/biliary disorder, a disorder associated with pregnant females, and a disorder associated with a fetus.
98. The method of claim 94, wherein said patient is pregnant.
99. The method of claim 94, wherein said patient is lactating.
100. The method of claim 94, wherein said nutritional deficiencies are a result of pregnancy.
101. The method of claim 94, wherein said nutritional deficiencies are a result of lactation.
102. The method of claim 94, wherein said nutritional deficiencies are a result of elevated metabolic demand.
103. The method of claim 94, wherein said nutritional deficiencies are a result of increased plasma volume.
104. The method of claim 94, wherein said nutritional deficiencies are a result of decreased concentrations of nutrient-binding proteins.
105. The method of claim 104, wherein said nutrient-binding proteins comprise one or more proteins selected from the group consisting of serum-ferritin, maltose-binding protein, lactoferrin, calmodulin, tocopheryl binding protein, riboflavin binding protein, retinol binding protein, transthyretin, high density lipoprotein-apolipoprotein A1, folic acid binding protein, and 25-hydroxyvitamin D binding protein.
106. The method of claim 94, wherein said Vitamin A comprises beta carotene.
107. The method of claim 94, wherein said Vitamin D comprises cholecalciferol.
108. The method of claim 94, wherein said Vitamin C comprises ascorbic acid.
109. The method of claim 94, wherein said Vitamin E comprises dl-alpha-tocopheryl acetate.
110. The method of claim 94, wherein said B-complex comprises one or more vitamins selected from the group consisting of folic acid, Vitamin B₁, Vitamin B₂, Vitamin B₆, Vitamin B₁₂, and niacin.
111. The method of claim 110, wherein said Vitamin B₁ comprises thiamine mononitrate.
112. The method of claim 110, wherein said Vitamin B₂ comprises riboflavin.
113. The method of claim 110, wherein said Vitamin B₆ comprises pyridoxine hydrochloride.
114. The method of claim 110, wherein said Vitamin B₁₂ comprises cyanocobalamin.

115. The method of claim 110, wherein said niacin comprises niacinamide.
116. The method of claim 94, wherein said calcium comprises calcium carbonate.
117. The method of claim 94, wherein said iron comprises ferrous fumarate.
118. The method of claim 94, wherein said magnesium comprises magnesium oxide.
119. The method of claim 94, wherein said zinc comprises zinc oxide.
120. The method of claim 94, wherein said copper comprises copper oxide.
121. The method of claim 94, wherein said Vitamin A is in the range of about 2430 IU to about 2970 IU.
122. The method of claim 94, wherein said Vitamin D is in the range of about 360 IU to about 440 IU.
123. The method of claim 94, wherein said Vitamin C is in the range of about 63 mg to about 77 mg.
124. The method of claim 94, wherein said Vitamin E is in the range of about 27 IU to about 33 IU.
125. The method of claim 110, wherein said folic acid is in the range of about 0.9 mg to about 1.1 mg.
126. The method of claim 110, wherein said Vitamin B₁ is in the range of about 1.44 mg to about 1.76 mg.
127. The method of claim 110, wherein said Vitamin B₂ is in the range of about 1.62 mg to about 1.98 mg.
128. The method of claim 110, wherein said Vitamin B₆ is in the range of about 2.25 mg to about 2.75 mg.
129. The method of claim 110, wherein said Vitamin B₁₂ is in the range of about 10.8 mcg to about 13.2 mcg.
130. The method of claim 110, wherein said niacin is in the range of about 16.2 mg to about 19.8 mg.
131. The method of claim 94, wherein said calcium is in the range of about 90 mg to about 110 mg.
132. The method of claim 94, wherein said iron is in the range of about 58.5 mg to about 71.5 mg.
133. The method of claim 94, wherein said magnesium is in the range of about 22.5 mg to about 27.5 mg.

134. The method of claim 94, wherein said zinc is in the range of about 22.5 mg to about 27.5 mg.
135. The method of claim 94, wherein said copper is in the range of about 1.8 mg to about 2.2 mg.
136. The method of claim 94, wherein said composition further comprises a pharmaceutically acceptable carrier.
137. The method of claim 136, wherein said pharmaceutically acceptable carrier comprises one or more of water, oil, alcohol, a flavoring agent, a preservative, a coloring agent, starch, a sugar, a diluent, a granulating agent, a lubricant, a binder, and a disintegrating agent.
138. A method for supplementing nutritional deficiencies in a patient comprising administering to said patient a composition comprising about 2430 IU to about 2970 IU Vitamin A, about 360 IU to about 440 IU Vitamin D, about 63 mg to about 77 mg Vitamin C, about 27 IU to about 33 IU Vitamin E, about 0.9 mg to about 1.1 mg folic acid, about 1.44 mg to about 1.76 mg Vitamin B₁, about 1.62 mg to about 1.98 mg Vitamin B₂, about 2.25 mg to about 2.75 mg Vitamin B₆, about 10.8 mcg to about 13.2 mcg Vitamin B₁₂, about 16.2 mg to about 19.8 mg niacin, about 90 mg to about 110 mg calcium, about 58.5 mg to about 71.5 mg iron, about 22.5 mg to about 27.5 mg magnesium, about 22.5 mg to about 27.5 mg zinc, and about 1.8 mg to about 2.2 mg copper.
139. A method for supplementing nutritional deficiencies in a patient comprising administering to said patient a composition comprising 2700 IU Vitamin A, 400 IU Vitamin D, 70 mg Vitamin C, 30 IU Vitamin E, 1 mg folic acid, 1.6 mg Vitamin B₁, 1.8 mg Vitamin B₂, 2.5 mg Vitamin B₆, 12 mcg Vitamin B₁₂, 18 mg niacin, 100 mg calcium, 65 mg iron, 25 mg magnesium, 25 mg zinc, and 2 mg copper.
140. A method for supplementing nutritional deficiencies in a patient comprising administering to said patient a composition comprising less than about 160 mg calcium, more than about 20 mg iron, and copper.
141. The method of claim 140, wherein said patient is in a physiologically stressful state.
142. The method of claim 141, wherein said physiologically stressful state comprises a disease state.
143. The method of claim 142, wherein said disease state is selected from the group consisting of a pulmonary disorder, a hematological/oncological disorder, a cancer, a disorder of the immune system, a cardiovascular disorder, a hepatic/biliary disorder, a disorder associated with pregnant females, and a disorder associated with a fetus.

144. The method of claim 140, wherein said patient is pregnant.
145. The method of claim 140, wherein said patient is lactating.
146. The method of claim 140, wherein said nutritional deficiencies are a result of pregnancy.
147. The method of claim 140, wherein said nutritional deficiencies are a result of lactation.
148. The method of claim 140, wherein said nutritional deficiencies are a result of elevated metabolic demand.
149. The method of claim 140, wherein said nutritional deficiencies are a result of increased plasma volume.
150. The method of claim 140, wherein said nutritional deficiencies are a result of decreased concentrations of nutrient-binding proteins.
151. The method of claim 150, wherein said nutrient-binding proteins comprise one or more proteins selected from the group consisting of serum-ferritin, maltose-binding protein, lactoferrin, calmodulin, tocopheryl binding protein, riboflavin binding protein, retinol binding protein, transthyretin, high density lipoprotein-apolipoprotein A1, folic acid binding protein, and 25-hydroxyvitamin D binding protein.
152. The method of claim 140, wherein said calcium comprises calcium carbonate.
153. The method of claim 140, wherein said calcium is in the range of about 90 mg to about 110 mg.
154. The method of claim 140, wherein said iron comprises ferrous fumarate.
155. The method of claim 140, wherein said iron is in the range of about 58.5 mg to about 71.5 mg.
156. The method of claim 140, wherein said copper comprises copper oxide.
157. The method of claim 140, wherein said copper is in non-chelated form.
158. The method of claim 140, wherein said copper is in chelated form.
159. The method of claim 140, wherein said copper is in the range of about 1.8 mg to about 2.2 mg.
160. The method of claim 140, wherein said composition further comprises one or more components selected from the group consisting of Vitamin A, Vitamin D, Vitamin C, Vitamin E, B-complex, magnesium, and zinc.
161. The method of claim 160, wherein said Vitamin A comprises beta carotene.
162. The method of claim 160, wherein said Vitamin D comprises cholecalciferol.

163. The method of claim 160, wherein said Vitamin C comprises ascorbic acid.
164. The method of claim 160, wherein said Vitamin E comprises dl-alpha-tocopheryl acetate.
165. The method of claim 160, wherein said B-complex comprises one or more vitamins selected from the group consisting of folic acid, Vitamin B₁, Vitamin B₂, Vitamin B₆, Vitamin B₁₂, and niacin.
166. The method of claim 165, wherein said Vitamin B₁ comprises thiamine mononitrate.
167. The method of claim 165, wherein said Vitamin B₂ comprises riboflavin.
168. The method of claim 165, wherein said Vitamin B₆ comprises pyridoxine hydrochloride.
169. The method of claim 165, wherein said Vitamin B₁₂ comprises cyanocobalamin.
170. The method of claim 165, wherein said niacin comprises niacinamide.
171. The method of claim 160, wherein said magnesium comprises magnesium oxide.
172. The method of claim 160, wherein said zinc comprises zinc oxide.
173. The method of claim 160, wherein said Vitamin A is in the range of about 2430 IU to about 2970 IU.
174. The method of claim 160, wherein said Vitamin D is in the range of about 360 IU to about 440 IU.
175. The method of claim 160, wherein said Vitamin C is in the range of about 63 mg to 77 about mg.
176. The method of claim 160, wherein said Vitamin E is in the range of about 27 IU to about 33 IU.
177. The method of claim 165, wherein said folic acid is in the range of about 0.9 mg to about 1.1 mg.
178. The method of claim 165, wherein said Vitamin B₁ is in the range of about 1.44 mg to about 1.76 mg.
179. The method of claim 165, wherein said Vitamin B₂ is in the range of about 1.62 mg to about 1.98 mg.
180. The method of claim 165, wherein said Vitamin B₆ is in the range of about 2.25 mg to about 2.75 mg.
181. The method of claim 165, wherein said Vitamin B₁₂ is in the range of about 10.8 mcg to about 13.2 mcg.

182. The method of claim 165, wherein said niacin is in the range of about 16.2 mg to about 19.8 mg.
183. The method of claim 160, wherein said magnesium is in the range of about 22.5 mg to about 27.5 mg.
184. The method of claim 160, wherein said zinc is in the range of about 22.5 mg to about 27.5 mg.
185. The method of claim 140, wherein said composition further comprises a pharmaceutically acceptable carrier.
186. The composition of claim 185, wherein said pharmaceutically acceptable carrier comprises one or more of water, oil, alcohol, a flavoring agent, a preservative, a coloring agent, starch, a sugar, a diluent, a granulating agent, a lubricant, a binder, and a disintegrating agent.